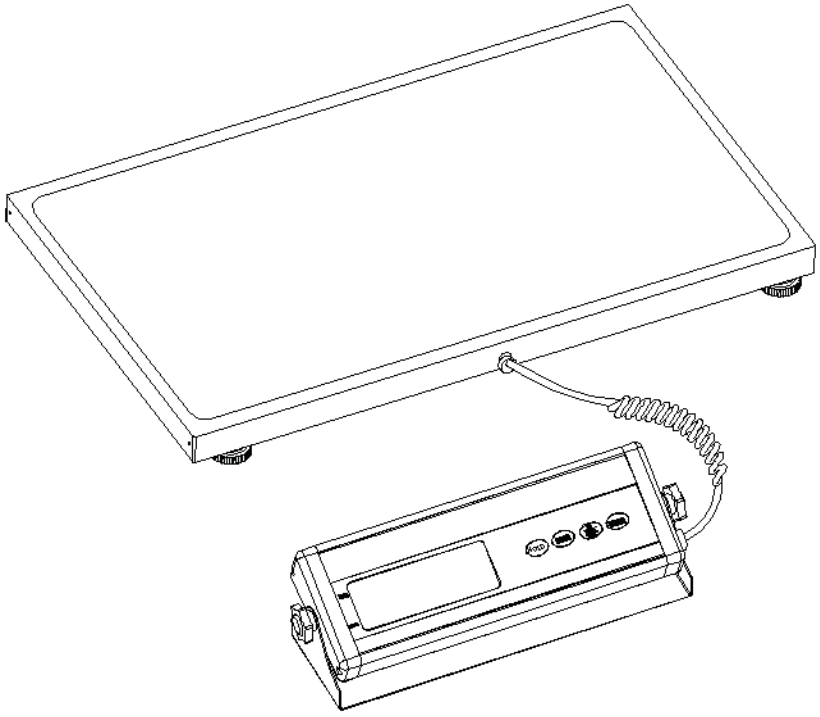
Cardinal®
DETECTO

MODEL VET330
DIGITAL VETERINARY SCALE
Operation Manual



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INTRODUCTION

Thank you for purchasing our Detecto Model VET330 Digital Veterinary Scale. The VET330 is equipped with a rechargeable battery pack that (after 14 hours of charging) is able to provide approximate 8 hours of continuous use.

This manual will guide you through setup and operation of your scale. Please read it thoroughly before attempting to operate this scale and keep it handy for future reference.

FCC COMPLIANCE STATEMENT

WARNING! This equipment generates uses and can radiate radio frequency and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user will be responsible to take whatever measures necessary to correct the interference.

You may find the booklet "How to Identify and Resolve Radio TV Interference Problems" prepared by the Federal Communications Commission helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402, stock No. 001-000-00315-4.

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Serial Number_____
Date of Purchase _____
Purchased Form_____
_____
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RETAIN THIS INFORMATION FOR FUTURE USE

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SPECIFICATIONS

Weight Display:	LCD, 7 Digit, with decimal 1.0" Characters
Dimensions of Display head:	10.63" W x 3.54" D x 1.77" H (270 mm x 90 mm x 45 mm)
Platform Size:	36" W x 22" D x 1.97"H (900 mm x 550 mm x 50 mm)
Zero:	Established on power up routine and maintained by auto-zero circuitry.
Power:	Built-in rechargeable battery pack (7.2VDC/1200mA) or 120 VAC 60Hz powering a 15 VDC 300 mA wall plug-in UL/CUL listed power supply
Tare:	100% of full scale capacity
Temperature:	40 to 105°F (5°to 35°C)
Humidity:	25% ~95% RH
Capacity and Division:	330lb x 0.2lb, 150kg x 100g
Keys:	HOLD, UNIT, ON/ZERO/OFF, TARE
Features:	Low battery indicator, Power saving selectable timing auto shut-off
Weight:	52 Lbs (23.5 kg)

PRECAUTIONS

Before using this instrument, read this manual and pay special attention to all "WARNING" symbols:

IMPORTANT

ELECTRICAL WARNING

INSTALLATION

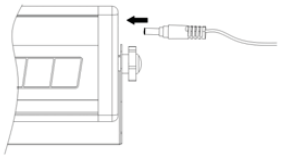
UNPACKING

Before beginning installation of your scale, make certain the instrument has been received in good condition. When removing the scale from its packing, inspect it for signs of damage, such as exterior dents and scratches. Keep the carton and packing material for return shipment if it should become necessary. It is the responsibility of the purchaser to file all claims for any damages or loss incurred during transit.

1. Remove the scale from the shipping carton and inspect it for any signs of damage.
2. Plug-in the 15VDC adapter to use the scale and to begin charging the battery pack. Refer to the POWER SUPPLY or BATTERY PACK sections of this manual for more instruction.
3. Place the scale on a flat level surface.
4. The scale is now ready for use.

POWER SUPPLY

To apply power to the scale using the supplied 15VDC, 300 mA power supply, insert the plug from the power supply cable into the power jack on the right side of the indicator and then plug power supply into the proper electrical outlet. The scale is now ready for operation.



BATTERY PACK

The scale uses a 7.2VDC, 1200 mA built-in rechargeable battery pack. The VET330 can operate for approximate 8 hours of continuous use with a fully charged battery pack.

BATTERY CHARGING

To recharge the battery pack, the power supply must be connected to an AC power outlet and plugged into the scale. It will take approximately 14 hours to fully recharge the battery pack in the scale. While the batteries are charging the VET330 can still be operated. Note that charging the battery pack for more than 14 hours *will not* damage it.

If the power supply is disconnected before the 14 hours, the scale will continue to charge the battery pack when the power supply is plugged back in.

LOW BATTERY

When the battery pack is near the point it needs to be recharged, a low battery indicator on the display will turn on. If the battery voltage drops too low for accurate weighing, the scale will automatically shut off and you will be unable to turn it back on. When the low battery indicator is displayed, the operator should plug the power supply into the scale and then into the proper electrical wall outlet. The scale will begin charging the battery pack.

DISPLAY FUNCTIONS

The display functions are turned on to indicate that the scale display is in the mode corresponding to the function label or that the status indicated by the label is active.

O
This is turned on when the weight display is stable.

This is turned on when a negative (minus) weight is displayed.

This is turned on when the scale weight has been zeroed.

This is turned on when the battery pack is near the point it needs to be recharged.

(HOLD)
This is turned on after pressing the **HOLD** key.

kg
This is turned on to indicate that the displayed weight is in kilograms.

lb
This is turned on to indicate that the displayed weight is in pounds.

KEY FUNCTIONS

HOLD

1. Press **HOLD** key, the arrow in the left bottom flashes.

   When the loaded weight is above 3.3 lb /1.5 kg and stable, the arrow stops flashing.
2. To disable the hold function, press **HOLD** key again, and the arrow disappears.
3. Press to confirm the setting for each menu.

UNIT

1. Press to change the weighing units to the alternate units of measurement (if selected during configuration of the scale).
2. Press to select menu in the Configuration mode.

ON / ZERO / OFF

1. Press and release to turn on scale.
2. Press and release to turn the scale off.
3. Press to reset the display to zero up to 20% of the scale capacity.

TARE

1. When there is load on the scale, press this key to return to zero.
2. Press and hold for 3 seconds to enter Configuration mode.

DO NOT operate the keypad with pointed objects (pencils, pens, etc).
Damage to keypad resulting from this practice is NOT covered under warranty.

OPERATION

TURN THE SCALE ON

Press the **ON / ZERO / OFF** key to turn the scale on.

The scale will display then change to the selected weighing units.

SELECT THE WEIGHING UNIT

Press the **UNIT** key to alternate between the selected weighing units. **NOTE!** Multiple weighing units must be enabled during configuration for this function to be operational.

WEIGH

Place the item to be weighed on the scale platform. Wait a moment for the scale display to stabilize, then read the weight.

TO RE-ZERO THE WEIGHT DISPLAY

To re-ZERO the weight display, press the **ZERO** key and continue. The scale will re-ZERO until 20% of full capacity is reached.

TO TARE THE WEIGHT DISPLAY

To tare the weight display, press the **TARE** key and continue. The scale will re-TARE until full capacity is reached.

TO HOLD THE WEIGHT DISPLAY

To hold the weight display, press the **HOLD** key. The weight will be held until the **TARE** key or **HOLD** key is pressed again.

CONFIGURATION

The Scale has been pre-configured at the factory and should not require configuration for use in most applications. In the event that the factory settings do not meet the requirements of your application, the following describes the steps to configure the scale.

TO BEGIN CONFIGURATION:

1. Press the **ON/ZERO/OFF** key to turn on the scale.
2. Press and hold **TARE** key for 3 seconds. When the display shows SEt, release the **TARE** key to enter the Configuration mode. The display will change to show UnIt.

WEIGHING UNITS

To select “kg” (kilogram) weighing units:

1. With the display showing UnIt, press the **HOLD** key. The display will change to show “kg” .
2. Press the **HOLD** key to display kg status.
3. Press the **UNIT** key to toggle between:

   Enable (display will change to On) or

   Disable (display will change to OFF).
4. Press the **HOLD** key. The display will change to UnIt.
5. Proceed to AUTOMATIC SHUTOFF.

To select “lb” (pounds) weighing units

1. With the display showing UnIt, press the **HOLD** key and then the **UNIT** key. The display will change to show “lb”.
2. Press the **HOLD** key to display lb status.
3. Press the **UNIT** key to toggle between:

   Enable (display will change to On) or

   Disable (display will change to OFF).
4. Press the **HOLD**. The display will change to UnIt.
5. Proceed to AUTOMATIC SHUTOFF.

AUTOMATIC SHUTOFF

1. With the display showing UnIt, press the press **UNIT** key. The display will change to show AOFF.
2. Press the **HOLD** key to begin selection of the automatic shut-off time (in seconds). The display will change to show 120.
3. Press the **UNIT** key to toggle through the selections, 120, 180, 240, 300, or OFF.
4. When the desired time is displayed, press the **HOLD** key. The display will change to show AOFF.
5. Proceed to GRAVITY COMPENSATION.

CONFIGURATION, Cont.

GRAVITY COMPENSATION

1. With the display showing [GRF], press the press **UNIT** key 4 times. The display will change to show [GrAU].
2. Press the **HOLD** key.

   To Enable the Gravity Compensation mode, press the **UNIT** key. The display will change to [On].

   To Disable the Gravity Compensation mode, press the **UNIT** key The display will change to [OFF].
3. Press the **HOLD** key again. The display will change to show [GrAu].
4. Press the **UNIT** key. The display will change to show [End].
5. Press the **HOLD** key to save the settings and reset the scale.
6. Setup is complete.

GRAVITY COMPENSATION

The Gravity Compensation for your scale has been pre-configured at the factory and should not require changing in most locations. In the event that the factory settings do not meet the requirements of your location, contact the factory for the value for your location.

With [GrAu] enable from the function setting of the Configuration mode, the scale will use the factory set value of 9.796 for the Gravity Compensation.

If the [GrAu] is disabled, the scale will use the value obtained from the factory and entered by the operator for the Gravity Compensation.

TO CHANGE THE GRAVITY COMPENSATION VALUE:

1. Press the **ON/OFF** key to turn on the scale.
2. Press and hold the **UNIT** key 3 seconds to enter Gravity Compensation mode, the display will show 9.796 (or the current value).
3. Enter the desired gravity value (press the **UNIT** key to choose number from 0~9, and press **HOLD** key to move to right digit.
4. Press **TARE** key (to confirm the entered gravity) and return the scale to the normal operating mode.

DISPLAY MESSAGES

DISPLAY	MEANING
	Low battery indication
ErrE	E^2prom Error
ErrL	Zero count too low
Err	Over Load / Zero count too high

CARE AND MAINTENANCE

The heart of the PS-7 Digital Portion Scale is a precision load cell located in the center of the scale base. It will provide accurate operation indefinitely if protected against overload of scale capacity, dropping items on scale, or other extreme shock.

DO NOT submerge scale or display in water, pour or spray water directly on them.

DO NOT use acetone, thinner or other volatile solvents for cleaning.

DO NOT expose scale or display to direct sunlight or temperature extremes.

DO NOT place scale in front of heating/cooling vents.

DO clean scale and display with a damp soft cloth and mild non-abrasive detergent.

DO remove power before cleaning with a damp cloth.

DO provide clean AC power and adequate protection against lightning damage.

DO keep surroundings clear to provide clean and adequate air circulation.